

CLAIMS

1. A method for transmission of packetized data in a wireless communication system having a designated packet error rate, the method comprising:
determining a first number of installments for transmission of a first subpacket of data;
power boosting transmissions of a second number of installments of the first subpacket of data, wherein the second number is less than the first number, wherein the second number is selected to satisfy the designated packet error rate; and
terminating transmission of the first subpacket of data after the second number of installments.
2. The method as in claim 1, wherein a power boosting gain factor is applied to each of the second number of installments.
3. The method as in claim 2, wherein the power boosting gain factor is nominally set to (N/M) , wherein N is the first number of installments, and M is the second number of installments.
4. The method as in claim 1, wherein terminating transmission of the first subpacket of data comprises:
initiating a second subpacket of data after the second number of installments.
5. The method as in claim 1, wherein the first number of installments for the first subpacket of data corresponds to a first time period, wherein terminating transmission of the first subpacket of data comprises:
waiting for expiration of the first time period; and
initiating transmission of a second subpacket of data after expiration of the first time period.
6. The method as in claim 1, further comprising:

receiving a negative acknowledgement message after transmission of the second number of installments; and
processing the first subpacket of data at a higher layer.

7. The method as in claim 1, further comprising:
receiving an acknowledgement message before transmission of all of the second number of installments; and
initiating transmission of a second subpacket of data.
8. An apparatus for transmission of packetized data in a wireless communication system having a designated packet error rate, the apparatus comprising:
means for determining a first number of installments for transmission of a first subpacket of data;
means for power boosting transmissions of a second number of installments of the first subpacket of data, wherein the second number is less than the first number, wherein the second number is selected to satisfy the designated packet error rate; and
means for terminating transmission of the first subpacket of data after the second number of installments.
9. The apparatus as in claim 8, wherein a power boosting gain factor is applied to each of the second number of installments.
10. The apparatus as in claim 9, wherein the power boosting gain factor is nominally set to (N/M) , wherein N is the first number of installments, and M is the second number of installments.
11. The apparatus as in claim 8, wherein means for terminating transmission of the first subpacket of data comprises:
means for initiating a second subpacket of data after the second number of installments.

12. The apparatus as in claim 8, wherein the first number of installments for the first subpacket of data corresponds to a first time period, wherein means for terminating transmission of the first subpacket of data comprises:

means for waiting for expiration of the first time period; and

means for initiating transmission of a second subpacket of data after expiration of the first time period.

13. The apparatus as in claim 8, further comprising:

means for receiving a negative acknowledgement message after transmission of the second number of installments; and

means for processing the first subpacket of data at a higher layer.

14. The apparatus as in claim 8, further comprising:

means for receiving an acknowledgement message before transmission of all of the second number of installments; and

means for initiating transmission of a second subpacket of data.

15. A base station apparatus comprising:

a packet processing unit adapted to receive data for transmission and generate subpackets, each of the subpackets transmitted in a number of installments;

a power boost unit adapted to apply a power boost factor to a portion of the subpackets;

an acknowledgement message processing unit adapted to terminate transmission of installments for a subpacket on receipt of an acknowledgement message; and

a transmitter for transmitting power boosted subpackets,

wherein the packet processing unit terminates processing of the subpacket on receipt of a negative acknowledgement message after the portion of the subpackets is transmitted.

16. A method for transmission from a mobile station in a wireless communication system, wherein each data packet received is transmitted in a number of installments, the method comprising:

transmitting a first negative acknowledgement message for a last installment of a first subpacket, the first negative acknowledgement transmitted at a first time slot; and

transmitting a second negative acknowledgement message for the last installment of the first subpacket, the second negative acknowledgement transmitted at a second time slot, wherein the second time slot is designated for the first subpacket of the next packet.

17. The method as in claim 16, wherein the first negative acknowledgement has a first bit pattern, and the second negative acknowledgement is a different bit pattern orthogonal to the first bit pattern.

18. An apparatus for transmission from a mobile station in a wireless communication system, wherein each data packet received is transmitted in a number of installments, the apparatus comprising:

means for transmitting a first negative acknowledgement message for a last installment of a first subpacket, the first negative acknowledgement transmitted at a first time slot; and

means for transmitting a second negative acknowledgement message for the last installment of the first subpacket, the second negative acknowledgement transmitted at a second time slot, wherein the second time slot is designated for the first subpacket of the next packet.